



SNS COLLEGE OF TECHNOLOGY
(An Autonomous Institution)
Coimbatore – 641035.



Unit 3 Topic 1

Occurrence - Chemistry of the cocoa bean

Cocoa Processing

Cocoa is the dried and fully fermented fatty seed of the cacao tree from which chocolate is made. "Cocoa" can often also refer to the drink commonly known as hot chocolate; cocoa powder, the dry powder made by grinding cocoa seeds and removing the cocoa butter from the dark, bitter cocoa solids; or it may refer to the combination of both cocoa powder and cocoa butter together.

A cacao pod has a rough leathery rind about 3 cm thick (this varies with the origin and variety of pod). It is filled with sweet, mucilaginous pulp called 'baba de cacao' in South America, enclosing 30 to 50 large almond-like seeds (beans) that are fairly soft and pinkish or purplish in color.

Cocoa should not be confused with the coca plant which can be used to create cocaine.



Cocoa beans in a cacao pod



Cocoa beans before roasting

History

The cacao tree is native to the Americas. It may have originated in the foothills of the Andes in the Amazon and Orinoco basins of South America where today, examples of wild cacao still can be found. However, it may have had a larger range in the past, evidence for which may be obscured because of its cultivation in these areas long before, as well as after, the Spanish arrived. It may have been introduced into Central America by the ancient Mayas, and cultivated in Mexico by the Olmecs, then by the Toltecs and later by the Aztecs. It was a common currency throughout Mesoamerica and the Caribbean before the Spanish conquest.

Cacao trees will grow in a limited geographical zone, of approximately 20 degrees to the north and south of the Equator. Nearly 70% of the world crop is grown in West Africa.

Cocoa was an important commodity in Pre-Columbian Mesoamerica. Spanish chroniclers of the conquest of Mexico by Hernán Cortés relate that when Montezuma II, emperor of the Aztecs, dined he took no other beverage than chocolate, served in a golden goblet and eaten with a golden spoon. Flavored with vanilla and spices, his chocolate was whipped into a froth that dissolved in the mouth. It is reported that Montezuma II may have consumed no fewer than 50 portions each day, and 200 more by the nobles of his court.



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Chocolate was introduced to Europe by the Spaniards and became a popular beverage by the mid 1600s.^[4] They also introduced the cacao tree into the West Indies and the Philippines.

The cacao plant was first given its botanical name by Swedish natural scientist Carolus Linnaeus in his original classification of the plant kingdom, who called it *Theobroma* ("food of the gods") *cacao*.